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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,522	06/01/2001	Norihiro Imamura	KIX0149-US	1361
36183 PAUL. HASTI	7590 12/17/200 NGS, JANOFSKY & V	EXAMINER		
875 15th Street, NW			THOMAS, BRANDI N	
Washington, DC 20005			ART UNIT	PAPER NUMBER
			2873	
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	ŧ		12/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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	Application No.	Applicant(s)	
	09/870,522	IMAMURA ET AL.	
Office Action Summary	Examiner	Art Unit	
	Brandi N. Thomas	2873	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATIO 36(a). In no event, however, may a reply be ti will apply and will expire SIX (6) MONTHS fron , cause the application to become ABANDONE	N. mely filed n the mailing date of this communication. ED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on <u>17 S</u> 2a)□ This action is FINAL . 2b)⊠ This 3)□ Since this application is in condition for alloware closed in accordance with the practice under E	action is non-final. nce except for formal matters, pr		
Disposition of Claims			
4) ⊠ Claim(s) <u>1-11</u> is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ⊠ Claim(s) <u>11</u> is/are allowed. 6) ⊠ Claim(s) <u>1-10</u> is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on <u>01 June 2001</u> is/are: a Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.)⊠ accepted or b)⊡ objected to drawing(s) be held in abeyance. So tion is required if the drawing(s) is o	ee 37 CFR 1.85(a). bjected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the prio application from the International Burea * See the attached detailed Office action for a list	ts have been received. Is have been received in Applica Inity documents have been receiv In (PCT Rule 17.2(a)).	tion No ved in this National Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	4)		
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	5) Notice of Informal 6) Other: <u>Detailed Ac</u>	Patent Application	

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DETAILED ACTION

Response to Amendment

1. Upon further consideration of the arguments provided by the applicant in the appeal brief file on, 9/17/07, the previous rejection has been withdrawn and a newly found reference has been applied.

SUPERVISORY PATENT EXAMINER

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al. (5023422) in view of Brown (4247493) further in view of Fujimoto (6545811).

Regarding claim 1, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4) comprising the steps of: forming a resin-molded piece which includes a plurality of lenses (8) each having a convex lens surface (col. 4, lines 47-49), and a holder portion (9) for holding the plurality of lenses (8) but does not specifically disclose applying a coating to the holder portion so as to surround said each lens surface at a predetermined spacing from an outer periphery of the lens surface; melting the applied coating for causing the melted coating to spread onto the outer periphery of the lens surface; melting the applied coating to the holder portion so as to surround said each lens surface; melting the applied coating to the holder portion so as to surround said each lens surface; melting the applied coating for causing the melted coating to spread onto

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the outer periphery of the lens surface, and solidifying the melted coating (col. 2, line 65-68, col. 3, lines 3-10, and col. 4, lines 16-19) but does not specifically disclose applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface. Fuijimoto discloses, in figure 2, applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface (col. 7, lines 44-55 and col. 8, lines 7-12). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Taniguchi et al. with the coating of Brown for the purpose of molding a lens array (col. 2, line 65-68, col. 3, lines 3-10, and col. 4, lines 16-19) and combining the device of Taniguchi et al. and Brown with the coating of Fujimoto for the purpose of a photoresist layer (col. 7, lines 44-55 and col. 8, lines 7-12).

Regarding claim 2, Taniguchi et al. discloses the claimed invention but does not specifically disclose wherein the plurality of lenses are integral with the holder portion. Brown discloses a method of making a lens array (4), wherein the plurality of lenses (8) are integral with the holder portion (9) (col. 4, lines 53-55). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device Taniguchi et al. with the lens and holder of Brown for the purpose of mounting the lenses.

Regarding claims 3 and 4, Taniguchi et al. and Brown disclose a method of making a lens array (4) but does not specifically disclose the coating comprising solid ink. It would have been obvious to use solid ink, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use (In re Leshin, 125 USPQ). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use solid ink for the purpose of its transparency.

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Regarding claim 5, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4), further comprising the step of forming a plurality of recesses (not labeled, the portion of the holder located below the lenses (8)) in the holder portion (9) for partitioning the plurality of lenses (8) (figure 1).

Regarding claim 6, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4), further comprising the step of forming a light-shielding layer (11) on wall surfaces defining the plurality of recesses (not labeled, the portion of the holder located below the lenses (8)) (col. 4, lines 61-63).

Regarding claim 7, Taniguchi et al. discloses, in figures 1 and 11, a method of making a lens array (4), further comprising the step of dividing the resin-molded piece into a plurality of individual lens array (figure 11).

Regarding claim 8, Taniguchi et al. discloses the claimed invention but does not specifically disclose a method of performing light shielding treatment for a transparent member having a fiat surface at least partially and a projection rising in the flat surface, the method comprising the steps of: applying a black material to the flat surface so as to surround the projection at a predetermined spacing from an outer periphery of the projection; melting the black material so that the melted black material spreads onto the outer periphery of the projection; and solidifying the melted black material. Brown discloses a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, the method comprising the steps of: applying a black material to the flat surface as to the holder portion so as to surround said each lens surface; melting the applied coating; and solidifying the melted coating (col. 2, line 65-68, col. 3, lines 3-10, and col.

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4, lines 16-19) but does not specifically disclose applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface. Fuijimoto discloses, in figure 2, applying the coating to surround the lens surface at a predetermined spacing from an outer periphery of the lens surface (col. 7, lines 44-55 and col. 8, lines 7-12). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Taniguchi et al. and Brown with the coating of Fujimoto for the purpose of a photoresist layer (col. 7, lines 44-55 and col. 8, lines 7-12).

Regarding claim 9, Taniguchi et al. discloses the claimed invention but does not specifically disclose a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a closed loop which surrounds the projection. Brown discloses a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a closed loop which surrounds the projection (col. 3, lines 3-10). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device of Taniguchi et al. with the black material of Brown for the purpose of surrounding the lens (col. 3, lines 3-10).

Regarding claim 10, , Taniguchi et al. discloses the claimed invention but does not specifically disclose a method of performing light shielding treatment for a transparent member having a flat surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a plurality of arc segments spaced from each other. Brown discloses a method of performing light shielding treatment for a transparent member having a flat

surface at least partially and a projection rising in the flat surface, wherein the applied black material constitutes a plurality of arc segments spaced from each other (col. 2, lines 65-68). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to combine the device of Taniguchi et al. with the black material of Brown for the purpose of surrounding the lens (col. 3, lines 3-10).

Allowable Subject Matter

- 4. Claim 11 is allowed.
- 5. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 11, wherein the claimed invention comprises a lens array including a first and a second light-shielding layer which are made of different materials and the second light-shielding layer, as claimed.

Response to Arguments

6. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on Monday - Thursday from 6-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PST BNT Brandi N Thomas Examiner Art Unit 2873

CLIPERVISORY PATENT EXAMINE